

Stripe Rust – A New Threat to Wheat Production in Saskatchewan

Presented to: S.S.G.A.

By: David Gehl

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Stripe Rust in Saskatchewan

- Stripe rust is a disease caused by the fungus *Puccinia striiformis*.
- Historically stripe rust has not been of economic significance in western Canada with the exception of irrigated areas of southern Alberta.
- Stripe rust has occurred more frequently in Manitoba and Saskatchewan since 2000.

Stripe Rust in Saskatchewan

- In 2006 a “hot spot” of stripe rust was detected in SE Saskatchewan.
- Fortunately weather conditions limited the spread and development of the disease.

Stripe Rust in Saskatchewan

- With the exception of soft white spring wheat, current varieties in western Canada have not been selected for resistance to stripe rust.
- However, there are varying levels of resistance to stripe rust in current varieties.
- Rating for stripe rust reaction has recently been initiated and for the first time ratings are included in *Varieties of Grain Crops*

Visual Symptoms of Stripe Rust



Close-up of Stripe Rust Pustules



UC Statewide IPM Project
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Stripe Rust of Wheat Flag Leaf



Considerations to Note

- Stripe rust survived over winter on winter wheat at Winnipeg and Indian Head last year.
- One infected leaf per 30ha (75ac) can produce severe infections.
- The period from infection to release of spores is as little as 8 days which can result in multiple generations per growing season.

Precautions

- Know the visual symptoms of stripe rust and monitor fields in the morning when new spores are distinctly **yellow**.
- Watch for “hot spots” of infection.
- Know your varieties’ stripe rust ratings.
- Contact S.A.F.R.R. staff for control measures if stripe rust is detected.